

Abstract of the Disclosure

System and Method for Monitoring the Performance of Dense Wavelength Division Multiplexing Optical Communication Services

The invention relates to a system and a method for monitoring all the characteristic parameters of a DWDM communication system.

In accordance with the invention this is implemented with two variants. Firstly, this is achieved by means of a specific grating spectrometer 1 displaying a high resolution and a high-speed sampling of the measured values, secondly by the application of an opto-electronic cross correlator 2 as a purely electronic solution.

The grating spectrometer 1 is expediently a particular system in a mixed array according to Ebert and Fastie, wherein the light to be measured passes four times through the grating in a specific manner.

The opto-electronic cross correlator 2 can mix the working light with a reference light tunable in terms of its frequency to form an electrical low-frequency signal that is analyzed in a high-impedance operation.